

Ser. No. 09/939,211
Response to Final Rejection of 21 January 2004
Atty Docket 117163-23

REMARKS

Claim Status

At the time of the Office Action to which a response is now made, Claims 1, 5, 6, 8-21, 24-26, 44, 50, 57, 64, 67, 70, 71, 74-78, 81, 82, 85, 86, 89, 90, 93-95, 99-101 are pending in the case, claims 2-4, 7, 22, 23, 27-43, 45-49, 51-56, 58-63, 65-66, 68-69, 72-73, 79-80, 83-84, 87-88, 91-92, 96-98 and 102-104 having been previously cancelled. Claims 25 and 26 are withdrawn from consideration by the Examiner, due to a restriction requirement made previously.

Claim 11 is cancelled and replaced by claim 105, as described below. Claim 64 is amended to depend from new claim 105, instead of cancelled claim 11.

Claim 50 is cancelled as being duplicative of claim 10, and claim 57 is cancelled as being dependent from claim 50.

Claims 25 and 26 are cancelled, responsive to the Examiner's notation that they are drawn to a non-elected invention in an earlier paper. Applicant reserves the right to file a divisional application to prosecute these claims.

As a result of these amendments, the remaining claims in prosecution are: 1, 5, 6, 8-10, 12-21, 24, 44, 64, 67, 70, 71, 74, 75-82, 85, 86, 89, 90, 93-95, 99-101 and 105. Of these, claims 1 and 24 are independent.

Drawing objections

The Examiner's prior objection to the drawings is presumed to be overcome by the amendment to the specification presented in the prior response, since the objection is not repeated.

Section 112 rejections

The Examiner has rejected a number of claims under 35 USC 112, second paragraph, as being indefinite. Applicant will now address each of these rejections.

The Examiner has rejected claim 5, due to a lack of antecedent basis for the term "the first direction." In the application as filed, claim 1 referred to "a first direction", but this was amended in the prior response to refer to "the longitudinal direction." The

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correction was not carried forward into claim 5, but is done so now. The same problem is addressed in claims 14, 71, and 74-76.

Further with respect to claim 5, the Examiner has repeated an objection that the phrase "a peripheral direction" is not clear. Applicant repeats its definition provided before, and further cites the Examiner to paragraphs [0046], [0048], [0063], [0068] and [0073], each of which uses the phrase in association with description of the various figures. From this, applicant believes that the meaning of the phrase should be quite clear. No amendments to the claims are made with regard to this point.

The Examiner has rejected claim 11 as being confusing and not understood, specifically because the Examiner does not understand the phrase "individually or in a portion-wise manner." Claim 11 is supported in the specification at paragraph [0048] and Figure 1, to which the Examiner is directed. Rather than amend claim 11, new claim 105 is introduced to replace it and clarify the limitation.

The Examiner has rejected claim 12 as having a double recitation of the same elements as claim 1. This is corrected, as it also is corrected in claims 64 and 67, which are of identical form.

Claim 24 is amended to provide antecedent basis for the term "first longitudinal direction." The Examiner has indicated that the device for producing relative movement in the first longitudinal direction is defined as being different from the device for producing relative movement in the second longitudinal direction, but that the disclosure does not show this. Applicant would suggest that paragraph [0032] supports the use of separate devices for producing relative movement of the sheathing device and the stent, even if the preferred embodiment disclosed shows the use of a single device for achieving the purpose.

Applicant believes that these corrections and comments fully address all of the Section 112 issues raised by the Examiner.

Section 102 rejections

The Examiner's failure to repeat any of the rejections previously made under 35 USC 102 indicates that those rejections have been overcome.

Section 103 rejections

Claims 1, 5, 6, 8-18, 24, 44, 50, 57, 64, 67, 70, 71, 74-78, 81, 82, 85, 86, 89, 90, 94, 95, 100 and 101 are rejected as obvious over US Patent 6,190,406 to Duerig ("Duerig '406")

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and US Patent 6,461,380 to Cox ("Cox '380"). Since claims 1 and 24 are the independent claims in this group, applicant chooses to address the response to those claims.

With respect to claim 1, the Examiner indicates that Duerig '406 discloses the use of bar elements and connecting bars, but fails to disclose the concept of having the connecting bars engage the central portion of the bar elements. The Examiner is quite correct. The connecting bars in Duerig '406 attach at both ends to turning points of the bar elements on adjacent support portions, rather than attaching to central portions. But claim 1, as presently stated, requires the connecting bar's second end to attach to a central portion of a bar element. While this concept is found in Cox '380, that reference teaches connecting both ends of the connecting bar to a central portion, instead of only one end. Thus, the present invention teaches a connecting bar that attaches at one end in the manner of Duerig '406 and at the other end in the manner of Cox '380.

There is nothing in either Duerig '406 or Cox '380 to suggest this combination, and, in fact, the combination taught has unexpected advantages over both Duerig '406 and Cox '380, rather than having the expected intermediate results. For example, to achieve a common goal of minimizing the longitudinal shortening of the stent upon expansion, Cox '380 is required to make the connecting bars significantly deformable so that the connecting bars expand in the longitudinal direction during the expansion step to compensate for contraction in the longitudinal direction of the annular support portions. Note, for example, curved portion 36 of Figure 1 of Cox '380, described at Col. 3, lines 59-63. The present invention teaches connecting bars that are substantially linear between their ends. Further, unlike Duerig '406, there is no need in the present invention to have the bar elements narrow in width in their central portions, as Duerig '406 teaches at Col. 6, lines 8-33.

With respect to claim 24, Duerig '406 may teach a device for holding the stent during relative movement between the sheathing device and the stent in a first longitudinal direction, but it lacks any teaching with regard to producing relative movement in both the first longitudinal direction and the opposite second longitudinal direction.

For at least these reasons, independent claims 1 and 24 are submitted to be non-obvious over the combination of Duerig '406 and Cox '380, and the additional piece of art (US Patent 6,015,429 to Lau) used to reject claims 19-21, 93 and 99 does not provide the

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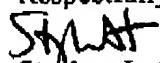
incentive to properly combine Duerig '406 and Cox '380, so applicant submits that all pending claims are allowable.

Provisional double patenting rejection

The Examiner's provisional obviousness-type double patenting rejection of all pending claims is noted. This rejection has been mooted by the abandonment of the co-pending application, Ser. No. 09/939,057.

It is believed that all issues raised by the Office Action have been addressed, and review and allowance of the claims as they stand after amendment is earnestly requested.

Respectfully submitted,


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